

HAMPSHIRE COUNTY COUNCIL

Report

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| Committee/Panel: | Buildings, Land and Procurement Panel |
| Date: | 17 th December 2013 |
| Title: | Winchester District Energy Project |
| Reference: | 5469 |
| Report From: | Director of Economy, Transport and Environment |

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1. Executive Summary

- 1.1. This report sets out current progress on the Winchester District Energy project including communication with the Department for Energy and Climate Change (DECC) and the associated funding bid made as a response.
- 1.2. If successful, the funding from DECC will contribute significantly towards further feasibility work required on the two possible schemes in Winchester before final business cases can be presented.
- 1.3. Should the application for funding to the DECC Heat Network Delivery Unit (HNDU) be successful, this report requests authority to commence the feasibility work and business case development on the Winchester District Energy scheme(s).

2. Contextual Information

- 2.1. Hampshire County Council has been investigating the potential of operating district energy schemes in Winchester. Such schemes would contribute towards the key priorities set out in the County Council's Energy Strategy by improving security of energy supplies; reducing carbon emissions and reducing spend on bills.
- 2.2. Two key opportunities have been identified in Winchester, one focused on the County Council's collection of headquarters buildings, and the other to the west of the city based on the Hospital, University and Prison.
- 2.3. The opportunity surrounding the cluster of County Council headquarters buildings, would deliver direct benefits of secure energy, lower energy bills and lower carbon emissions for the County Council. Work has been undertaken internally into the high-level viability of this scheme which has shown that there is potential to save around £4 million on the energy costs

over the 25 year timeframe modelled for the project. The scheme will return a positive cash flow (payback) from year 13 and continue to deliver positive returns past the 25 year financial modelling period. The proposed scheme has a Net Present Value in the region of £1.5 million. It will also save around 600 tonnes of CO2 per annum.

- 2.4.** The 'West scheme', although offering the County Council no direct benefit as a "user", represents a significant heat demand based around a mix of users. A high level feasibility study was undertaken that provided a positive indication of a viable scheme, and a potential investment opportunity if operated as a public sector ESCo. This approach would allow the council to take advantage of borrowing opportunities and benefitting on loan margin differences of around £3.5* million over 20 years. The Council would then also benefit from dividends returned through the ESCo as a result of operating surpluses.
- 2.5.** These results therefore indicate that there are two options going forward:
- a) Develop a scheme serving just the County Council buildings in order to reap the direct benefits; or
 - b) Develop a larger scheme connecting both areas thereby making the most of the financial benefits of the West scheme whilst also gaining the direct benefits of the County Council scheme. This "connected" option has been looked into at a very high level and shows that it is a potentially viable option.

3. Scope of Work / Review of Progress

- 3.1.** The Department for Energy and Climate Change recently established a Heat Network Delivery Unit (HNDU) to encourage and provide support to local authorities in developing and delivering district energy schemes.
- 3.2.** One of the key aims of the HNDU is to support development of networks outside of the big cities. The HNDU has been allocated an initial £6 million budget to aid the development work of such projects, under match funding arrangements with the Unit contributing two thirds of the development costs.
- 3.3.** The County Council expressed an interest in applying for funding and submitted an outline proposal - a scheme based on the County Council buildings, with a view to a later development and connection to the West scheme, if viable.
- 3.4.** Stephen Brooks, the Director of HNDU, visited Winchester to discuss the 'proposal' and look at the potential sites. He was extremely positive, and encouraged the County Council to submit a full application. He believed that both schemes were viable and connecting the two schemes would be an ideal outcome but recognised the need for detailed business cases to

* PWLB at 3.57% over 20 years. Commercial rate at 7.5% over same period

support this, although acknowledging that the County Council is already very well advanced compared to other schemes nationally.

- 3.5. Both schemes are compliant with recent national policy developments, in particular the DECC “The Future of Heating: a Strategic Framework for Low Carbon Heat” publication which is seeking to promote and incentivise district energy schemes.
- 3.6. Based on this, and following discussions with the Executive Member for Income and Capital Resources, an application has now been submitted for detailed feasibility work into a County Council led scheme focused on:
 - a) Further feasibility and technical work on the County Council headquarters scheme to prepare a full business case for delivery.
 - b) Further technical work on the West scheme to finalise the business case for delivery.
 - c) Technical and financial feasibility of the link between the two schemes, and identify solutions to any potential barriers.
 - d) Assess opportunities for alternative fuel sources for the schemes.

4. Finance

- 4.1. A HNDU funding application was submitted on the 13th November 2013 based on this proposal for a total of £215,000. If successful, HNDU funding would cover £144,000 of this and the remaining £71,000 would be funded by the County Council.

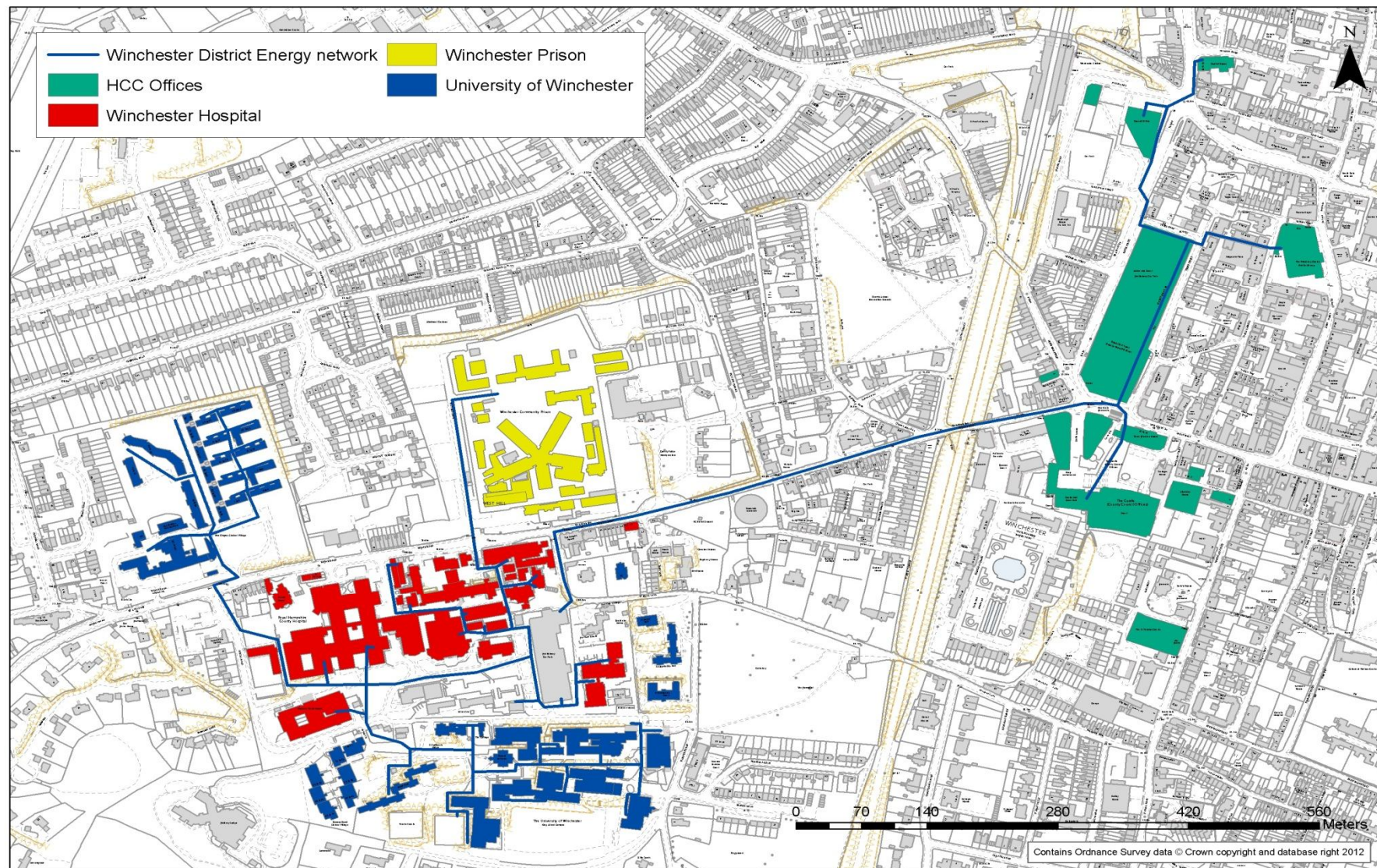
5. Risk and Impact Issues

- 5.1. There is no commitment from the County Council to undertake the works proposed in this paper until a Memorandum of Agreement is signed with HNDU. This would only take place if the bid were successful.
- 5.2. If the works proposed were undertaken and the feasibility and business cases prove to be viable, this would give the County Council a scheme(s) upon which it can make an investment decision. In such a case, authority for capital funding allocation for the Design, Build and Operate of the schemes could be formally made.
- 5.3. It is anticipated that from receipt of funds from HNDU, the works would require 18 months to reach the stage outlined in para. 5.2.

6. Recommendations

That the Panel advises the Executive Member for Policy and Resources that:

Should the application for funding to the Heat Network Delivery Unit (HNDU) be successful, that authority to proceed be given to commence further feasibility work and business case development on the Winchester District Energy scheme(s).



CORPORATE OR LEGAL INFORMATION:**Links to the Corporate Strategy**

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| Hampshire safer and more secure for all: | No |
| Corporate Improvement plan link number (if appropriate): | |
| Maximising well-being: | Yes |
| Corporate Improvement plan link number (if appropriate): | |
| Enhancing our quality of place: | Yes |
| Corporate Improvement plan link number (if appropriate): | |

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

DocumentLocation

None

IMPACT ASSESSMENTS:

1. Equalities Impact Assessment:

- 1.1.** It is considered that the issues covered by this report will not have impacts requiring further specific actions by the Council above those already established in its existing policies and working procedures.

2. Impact on Crime and Disorder:

- 2.1.** The County Council has a legal obligation under Section 17 of the Crime and Disorder Act 1998 to consider the impact of all the decisions it makes on the prevention of crime. It is not considered that the proposals in this report will have any adverse crime and disorder impacts.

3. Climate Change:

- 3.1.** Delivery of the Winchester District Energy project will allow the generation of low-carbon energy. This will potentially lead to a reduction in the carbon footprint and increased levels of local energy security for several major public sector organisations within Winchester, including the County Council. The project is also likely to reduce energy usage, and decrease carbon emissions.
- 3.2.** Hampshire County Council is heavily reliant on grid-based fossil fuel imports for its energy. Climate change has the potential to significantly impact upon the energy sector. Changes to climate and severe weather events may affect the UK's capacity to generate energy and distribute power and may alter patterns of energy consumption and use. Because energy markets operate in a global context, climate change impacts elsewhere in the world that significantly impact global energy supply may also have the potential to indirectly affect Hampshire.
- 3.3.** By taking action to increase security of local energy supply, and reducing our reliance on national infrastructure, Hampshire will be better placed should climate change lead to interruptions of energy supply. It will also help to ensure business continuity and the maintenance of service delivery in the case of extreme weather events.